

RESERVOIR SEDIMENTATION  
DATA SUMMARY

C. W. Lester Farm Pond No. 1

50-5

NAME OF RESERVOIR  
Trib. of

DATA SHEET NO.

DAM	1. OWNER C. W. Lester			2. RIVER/Broken Leg Creek			3. STATE Oklahoma				
	4. SEC. 16 TWP. 13 N RANGE 24 W			5. NEAREST TOWN Cheyenne			6. COUNTY Roger Mills				
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.				
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL					1945					
	b. POWER										
	c. WATER SUPPLY	100	7.2	42.4	42.4	16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										
	e. CONSERVATION										
	f. INACTIVE					1945					
17. LENGTH OF RESERVOIR		0.9	MILES	AV. WIDTH OF RESERVOIR		0.02	MILES				
WATERSHED	18. TOTAL DRAINAGE AREA		2.04	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		25.8	(25) INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA		2.03	SQ. MI.	23. MEAN ANNUAL RUNOFF		INCHES				
	20. LENGTH	2.0	MILES	AV. WIDTH	1.0	MILES	24. MEAN ANNUAL RUNOFF				
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Sub-humid						
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA ACRES	32. CAPACITY ACRE- FEET	33. C <sub>w</sub> RATIO AC-FT. PER SQ. MI.			
	1945 June 1949	- 4	- 4	- Range Recon.	- 5	7.2 7.0	42.4 22.8	20.8 11.2			
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AQ-FT.					
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE				
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.						
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR				
	June 1949	19.6	4.90	2.41	19.6	4.90	2.41				
	26. DATE OF SURVEY	39. AV. DRY WGT. LBS. PER CU. FT.	40. SED. DEP. TONS PER SQ. MI.-YR.		41. STORAGE LOSS PCT.		42. SED. INFLOW PPM				
			a. PERIOD	b. TOTAL TO DATE	a. AV. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE			
June 1949				11.56	46.23	-	-				

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
Report of Sedimentation in C. W. Lester Pond No. 1, G. W. Renfro and R. L. Marshall, June 1949. (Unpublished)															
Sediment in the lower part of the lake is a reddish brown or dark brown silt and clay. In the upper portion the sediment is reddish brown silty fine sand.															
48. AGENCY SUPPLYING DATA <u>Region 4, Soil Conservation Service</u> 49. DATE <u>December 28, 1950</u>															
U. S. Dept. of Agriculture Fort Worth, Texas															